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Text Formatter Owner's Manual

For Use With the HP-75

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Introducing the Text Formatter

The Text Formatter will produce finished printed or plotted documents from text files you have stored in the HP-75. This is useful for creating memos, form letters, personal letters, short reports, and other documents.

The process of creating a document consists of two steps:

1. Creating the text file.
2. Running the program **FORMAT75** (which is part of the Text Formatter module).

As you compose a text file, you can *embed* (include) text formatter commands in it. (You can also embed commands after the text file has been written.) These embedded commands will determine how your formatted, printed (or plotted) document will look.

When you run the program **FORMAT 75** on a text file, that file gets printed out according to the formatter commands you have embedded in it. These commands can do such things as start new paragraphs, set margins, number pages, and so on. After becoming familiar with the Text Formatter you will soon be able to produce documents "on the run"—while riding home or waiting for an appointment. Using the Text Formatter, you can be sure that the final document will look neat and well structured.

The Text Formatter has a number of features for formatting various documents, including:

- Paragraph breaks and indentation.
- Spacing, margin, and page length adjustments.
- The ability to insert information from a distribution list of names into another document.
- Plotter control.
- The ability to merge files.

Included in the box with your Text Formatter module and this manual are:

- Two prerecorded magnetic cards.
- One keyboard overlay.
- A Quick Reference Card.

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How to Use This Manual

The information in this manual assumes that you have read sections 1, 2, 3, and 9 of the *HP-75 Owner's Manual*. Specifically, you should know how to create and edit a text file (section 3), and how to connect, assign, and operate your printer and/or plotter (section 9 and the owner's manual for the printer or plotter).

This manual is both a learning tool and a reference tool. Read through section 1 ("Getting Started") for an overview of what the formatter does. Read and work through the examples in section 2 ("Using Text Formatter Commands") to find out how to operate the formatter. Later, when you need brief descriptions and reminders for the text formatter commands, refer to the *Quick Reference Guide* or the Command Summary and Index at the back of this manual. This index includes page references, as does the Subject Index.

There are also several appendices for your reference:

- Appendix A, "Owner's Information," includes warranty and service information.
- Appendix B is "Error and Status Messages." If the Text Formatter cannot carry out a certain command, it will print out an error message. Refer to appendix B for an explanation of the messages that the Text Formatter can generate. (For other messages, see the *HP-75 Owner's Manual*.)
- Appendix C, "Text Formatter Applications," contains two examples of documents that can be prepared by the Text Formatter. One of them, the file F75START, is recorded on a magnetic card included with the formatter module.
- Appendix D, "Typing Aids (F75KEYS)," describes the set of key redefinitions supplied as F75KEYS on a magnetic card included with the module. A corresponding overlay for the keyboard is also included. (Information on redefining the keyboard is in section 10 of the *HP-75 Owner's Manual*.) You can perform HP-75 functions faster if they are assigned to keys, because then you don't have to type them out.
- Appendix E, "The Help File (F75HELP)," shows a list of the Text Formatter commands. This file is supplied on a magnetic card included with the module.
- Appendix F, "The Prompt File (F75PRMPT)," describes the use of F75PRMPT, a file on a magnetic card included with the module. The prompt file allows you to create personalized messages for the Text Formatter to use.
- Appendix G, "Advanced Printing Techniques," describes the use of *escape sequences* to obtain different kinds of typeface (boldface, compressed, expanded, etc.).
- Appendix H, "Calling FORMAT75 from a BASIC Program," tells you how to set up another program to run FORMAT75, the text-formatting program.

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Getting Started

Installing and Removing the Text Formatter Module

The Text Formatter module can be plugged into any of the three ports on the front edge of the computer.

CAUTIONS

- Be sure to turn off the HP-75 (press **SHIFT** **ATTN**) before installing or removing any module. If there are any pending appointments, type **alarm off** **RTN** in EDIT mode to prevent the arrival of future appointments (which would cause the computer to turn on). If the computer is on or if it turns itself on while a module is being installed or removed, it might reset itself, causing all stored information to be lost.
- Do not place fingers, tools, or other foreign objects into any of the ports. Such actions could result in minor electrical shock hazard and interference with pacemaker devices worn by some persons. Damage to port contacts and internal circuitry could also result.

To insert the Text Formatter module, orient it so that the label is right-side up, hold the computer with the keyboard facing up, and push in the module until it snaps into place. During this operation be sure to observe the precautions described above.



To remove the module, use your fingernails to grasp the lip on the bottom of the front edge of the module and pull the module straight out of the port. Install a blank module in the port to protect the contacts inside.

What the Text Formatter Does

The Text Formatter module contains a program, FORMAT75, that will process a text file and print out a document. FORMAT75 looks for special commands in your text file that tell it what to do. There are two steps to creating a document:

1. Prepare the text file by including or inserting the desired text formatter commands. (Once these commands are part of your file, they are termed *embedded*.)
2. Run FORMAT75 (that is, type `run 'format75'` and press [RTN]).

To illustrate this process, enter a sample file and run FORMAT75 as shown below. For now, don't worry about what all the commands and numbers mean—these will be explained in the following section. This example will show you different ways the Text Formatter can prepare a document.

Input/Result

`edit 'sample', text [RTN]`

SAMPLE	T	0 13:07 05/18/83
--------	---	------------------

Creates a text file name SAMPLE and displays the catalog entry for this file. (Your time and date will vary.) You can use upper- or lower-case letters.

`auto [RTN]`

:10 ■

For convenience, execute the AUTO command to provide line numbers automatically. This starts the numbering at line 10. A space is added after each line number.

Enter the following file as it is listed below. Remember that you must press [RTN] after typing each line to process that line and enter it in memory. For any shifted characters, hold down [SHIFT] while pressing the other key. For example, to get ^, press [SHIFT] [*]. If you make a typing mistake, use [BACK] to correct it. This example is for demonstration, so don't worry about what the embedded formatter commands (like ^CE) mean—they will be explained in the next section. You can type the formatter commands in upper- or lower-case. (^CE is the same as ^ce.) You do not have to include a space at the end of a line—the formatter automatically puts a space between the words at the end of one line and the beginning of the next. (So don't break a word across two lines, because it will be interpreted as two different words.)

```
:10 ^ce FORMATTER DEMONSTRATION
:20 ^sk 3 ^pa This is a demonstration of the
:30 Text Formatter for the HP-75.
:40 You can build a text file in memory
:50 without worrying about the actual
:60 structure of your text. In fact,
:70 you can even put just one word
```

Centers title.
Skips three lines, starts new paragraph.

- :80 on
- :90 each
- :100 line.
- :110 ^pa When printing, the formatter reads
- :120 embedded commands to decide when to start a new
- :130 paragraph, set margins, or alter other
- :140 aspects of the final document.

Starts new paragraph.

(When you are done entering this file, you can stop the automatic numbering by pressing [ATTN].)

Notice that the lines in your text file can be ■ short or ■ long as is convenient for you—you can key in up to 95 characters per line. In this manual, you will ■ that most of the lines in the text files are close to the length of one display (32 characters). This is ■ convenient way for you to easily review the contents of one line.*

Connecting to a Printer

The work that you have done up to now can take place anywhere: at your desk, while traveling, or out in the field. When you get back to your printer, connect it to the HP-75 and prepare to produce your printed document. (Section 9, “HP-IL Operations,” of the *HP-75 Owner’s Manual* explains how to connect a peripheral device, how to assign it a device code, and how to declare the printing device to the computer.)

The examples in this manual use the HP 82905B Impact Printer (option 248 for HP-IL). For other printers, refer to their owner’s manuals.

HP-IL Connection. After attaching the printer or plotter to the HP-75 with HP-IL cables, use the ASSIGN10 command to assign the device code, and then use the PRINTER IS': device code' command to declare the printing device.

Paper Alignment. For various formatting operations to function properly, each formatting job must begin with the printer’s printhead aligned with the top of a page; that is, the printhead should be on the first line of ■ sheet after the perforation.

When your formatting job is done and you want to tear off the last sheet of fanfold paper from the printer, form-feed the paper before tearing it off. (Take the printer off-line first by pressing the ON LINE button, press the Form Feed button, then press the ON LINE button again.) The form-feed advances the paper for removal, moving it until the printhead is on the first line of a new sheet. This will ensure that your printer paper is always correctly aligned for formatting.

* If you prefer to set a line length shorter than 95 characters, you can set the HP-75 MARGIN command to beep as a reminder that you are approaching the end of the line. Refer to section 2 in the *HP-75 Owner’s Manual*.

Running FORMAT75

You are now ready to run the Text Formatter:

Input/Result

run'format75' [RTN]

FILE, # OF COPIES: SAMPLE ,1

The Text Formatter prompts you for the name of the file you want to format and the number of copies you want.

Notice that, by default (if you don't change it), the file to be formatted will be the current edit file (that's SAMPLE here), and the number of copies will be one. The cursor blinks at the first letter of the file name as a signal to change it if you want to.

For this example, simply press [RTN] to begin formatting.

Input/Result

[RTN]

FORMATTING . . .

Indicates that your file is being formatted and printed.

DONE

Indicates that printing is complete.

If you get an error message instead of the above displays, refer to appendix B in this manual ("Error and Status Messages") or appendix E in the HP-75 owner's manual ("Error Conditions"), as necessary.

Your final document will be printed as follows:

FORMATTER DEMONSTRATION

This is a demonstration of the Text Formatter for the HP-75. You can build a text file in memory without worrying about the actual structure of your text. In fact, you can even put just one word on each line.

When printing, the formatter reads embedded commands to decide when to start a new paragraph, set margins, or alter other aspects of the final document.

Plotting With the Text Formatter

If you want to produce text on a plotter—such as for overhead transparencies, covers, or posters—you can also use the Text Formatter to format a text file for plotting. (The plotter must be a printer compatible with HP-IL, such as the HP 7470A opt. 003 plotter.)

To prepare a text file for formatting and plotting, you use the same formatter commands as usual, with the addition of the ^SL command to specify pens and character formation. Refer to the ^SL (*slide*) command for instructions and examples for text-formatted plotting (page 31). For a quick demonstration on the plotter, connect a plotter, assign it a device code (like ':P1'), declare the plotter to be the printer (Printer is ':P1'), and add the following lines to SAMPLE. For instructions on connecting the plotter to the HP-IL loop, refer to section 9 in the *HP-75 Owner's Manual*.

```
:5 ^sl 1 6 10  
:15 ^sl 1 4 0
```

Input/Result

:run 'format75' [RTN]

FILE, # OF COPIES: SAMPLE .1

[RTN]

FORMATTER DEMONSTRATION

This is a demonstration of the Text Formatter for the HP-75. You can build a text file in memory without worrying about the actual structure of your text. In fact, you can even put just one word on each line.

When printing, the formatter reads embedded commands to decide when to start a new paragraph, set margins, or alter other aspects of the final document.

Section 2

Using Text Formatter Commands

This section describes how to use the Text Formatter commands in general, and then specifically discusses the meaning and use of each command. For an alphabetical listing of the commands, refer to the Command Summary and Index at the back of the manual.

General Syntax for Commands

Text formatter commands are put into a text file either while the text file is being written or afterwards. All the commands are two-letter mnemonics (such as `^MFI` for *margin*), which you can type in upper- or lower-case letters. You can string together more than one command on one line, and you can follow command(s) with text, but *any commands on a line must appear before any text on the same line*. Any command appearing after text will be interpreted as text.

The single line

```
:20 ^sk ^pa This is a demonstration of the
```

is equivalent to the following three lines:

```
:20 ^sk
:21 ^pa
:22 This is a demonstration of the
```

The Command Character (^)

Every individual formatting command in a text file must be preceded by the *command character*, the circumflex (^). It is the command character that signals the presence of a command to the Text Formatter. You can redefine the command character from the ^ to another character by using and storing the prompt file, appendix F.

Parameters

Each command can be followed by one or more parameters, such as numbers or file names. If a parameter is *optional*, then you don't have to supply that parameter. If you don't supply an optional parameter, then the computer uses ■ *default value* for that parameter.*

If there are two optional parameters, you can omit them both or omit just the second one, but you cannot omit just the first one.

:5 ^ma

Uses the default parameters 13 (left margin) and 72 (right margin).

:5 ^ma ■

Uses the default parameter for the right margin, so the margins are 8 and 72.

:5 ^ma 8 68

Sets margins to columns 8 and 68.

Separating Parameters. If you give more than one parameter for a command, the parameters *must* be separated from each other by one or more *spaces*. However, you do not need a space between a command and a following parameter.

:5 ^ma1 9

Sets margins to columns 1 (left) and 9 (right).

:5 ^ma19

Sets margins to 19 (left) and, by default, 72 (right).

Default Values. A default value takes effect until some other value is explicitly given. The default values for all the conditions and commands are re-established each time you run FORMAT75. They are then altered by specific commands in your text file. Therefore, any conditions that you set up in one text file (like margins, spacing, page numbering, and so on) *will not have any effect on any other file*.

Numeric Values. Numeric parameters must be integers. The range for a parameter can depend on other conditions; for instance, it is not possible to set a paragraph to indent further than the right margin!

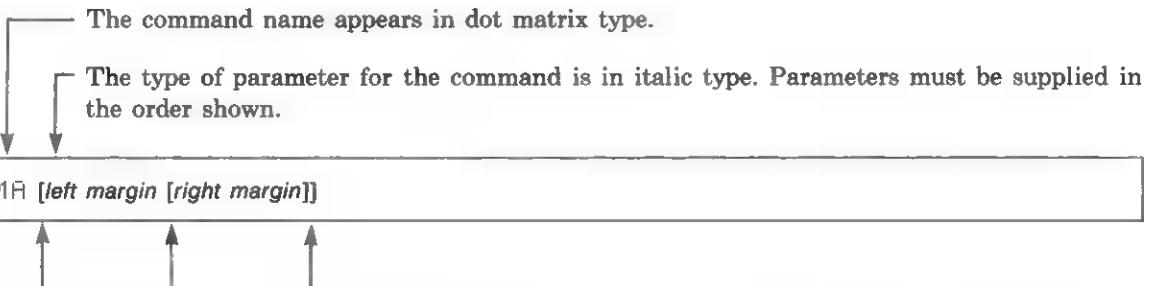
Text Input and Output

The Text Formatter ignores any trailing (ending) spaces in a line of text from your text file. It also ignores the first space after the line number. (Depending on the text mode, it can ignore *all* leading—that is, beginning—blanks.) It automatically adds a space between the last word from one line and the first word from the next line in the file. The Text Formatter will not divide or hyphenate words between lines.

* A *default* condition or parameter is one that is in effect “by default” unless you specifically change or redefine that condition.

Typing Conventions in This Manual

Each command described in this section includes a syntax box, which includes the following information:



If the parameters are optional, they are enclosed in brackets. Nested brackets, as in this example, indicate a hierarchy: the value for the left margin can be given without the value for the right margin, but the right margin cannot be given without the left margin.

Note that items for you to type in exactly as shown are printed in DOT MATRIX type, while items that are merely descriptions are printed in *italic* type. Specific keys on the HP-75 are shown in key boxes, such as [RTN]. To get ■ shifted or ■ control character, you must hold the [SHIFT] or [CTL] key while pressing the desired character key, such as [SHIFT] [*] (which represents the same keystrokes as [^]), or [CTL] [BACK] (which represents [ESC]).

Modes of Formatting Text

There are four *text modes* for formatting lines of text. They are set by the commands ^FI (*Fill*), ^JU (*Justify*), ^CO (*Copy*), and ^CE (*Center*). Both Fill and Justify are filling operations, while both Copy and Center are copying operations. It is optional to include ■ *page-test parameter* with a text mode command.

Filling Lines and Justifying Lines (^FI, ^JU)

When the Text Formatter produces lines of text, it *fills up* every line of text it prints out with as many whole words as will fit. To produce one line of formatted, printed text, the formatter will use as much text as necessary from your text file, normally ignoring any extra spaces in the text file. This is why it doesn't matter how much or how little you write on a line in your text file: when FORMAT75 runs, it fills up each line as much as it can, given its margins. The left margin is justified.

■ Section 2: Using Text Formatter Commands

The two *text-filling modes* are Fill mode and Justify mode.

^FI [page-test parameter]

^JU [page-test parameter]

- *Fill mode* (^FI) is the *default* text mode for the text formatter. Everytime you run FORMAT75, Fill mode is automatically set. Fill mode operates as described above.
- *Justify mode* (^JU) will justify the right margins by adding spaces between words. Otherwise, it operates like Fill mode.

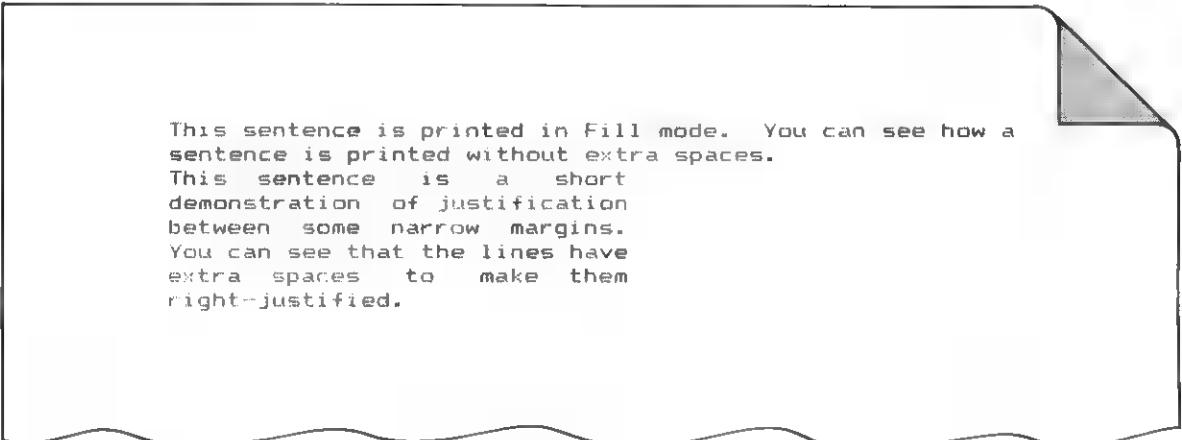
In either of these modes, a *single* space following ■ period or colon is expanded two spaces.

If you specify a page-test parameter, these commands will also check how many lines remain on the page being printed. The page-test parameter checks for a minimum number of lines. Page testing is explained below (page 21) under "Testing for the End of the Page."

Example: The following short text file shows the effects and differences of Fill mode and Justify mode. (Remember: to create a named text file, type `edit 'file name'`, `text` **RTN**.)

```
:10 This sentence
:20 is
:30 printed in Fill
:40 mode.
:50 You can see how a sentence is
:60 printed without extra spaces.
:70 ^ma 13 43 ^ju
:80 This sentence is ■ short
:90 demonstration of justification
:100 between some narrow margins.
:110 You can see that the lines
:120 have extra spaces to make them
:130 right-justified.
```

The formatted, printed output is:



```
This sentence is printed in Fill mode. You can see how a
sentence is printed without extra spaces.
This sentence is a short
demonstration of justification
between some narrow margins.
You can see that the lines have
extra spaces to make them
right-justified.
```

Keeping Words Together (Fixed Space). If you want to be sure that a particular pair of words won't be split between lines during printing, or you don't want the justification procedure to add extra spaces between them, put a *fixed-space character* instead of a space between the two words. The fixed-space character is the tilde, ~, but you can define it to be another character by using the prompt file (described in appendix F). (To display the ~, press **CTL** *****.)

For instance, if you want to be sure that the phrase "HP-75 Computer" is printed all on one line and (in Justification mode) without any extra spaces between the two words, type it into your text file as HP-75~Computer. The ~ character will *not* be printed; it will appear as a space.

Duration. When Fill mode or Justify mode is set, it lasts for the duration of that particular run of FORMAT75, unless you change it. (Fill mode is automatically set each time FORMAT75 runs.) However, these two text modes are *suspended* by the text-copying modes, copy (^C0) and center (^CE). After copying or centering ends (as explained below under "Copying and Centering Lines") the formatter sets Fill mode.

Breaking. There are several commands that involve ■ *break* in the output of the current printing line. Printing then resumes on a *new* line. For instance, when a command to skip lines (^SK) occurs, the Text Formatter *stops adding words to the current line of print*, performs the skip, and resumes printing the subsequent text onto a new printed line.

As an example, in Justification mode the last line of a paragraph will not be justified. This is because the output for that line will be broken by ■ subsequent ^PA, ^SK, or ^CO command (as examples). Also, the very last line from a file is not justified.

The commands that cause a break in output and start new lines of print are:

^AD <i>Advance Page</i>	^FI <i>Fill</i>	^PA <i>Paragraph</i>
^CE <i>Center</i>	^JU <i>Justify</i>	^SL <i>Slide</i>
^CO <i>Copy</i>	^MA <i>Margin</i>	^SK <i>Skip</i>

You can use ^SK 0 to cause ■ *break* in printing without any other effect.

Copying Lines and Centering Lines (^CO, ^CE)

There are times when you won't want the Text Formatter to "fill up" your lines, but instead will want it to print out a line of text exactly ■ it appears in the text file. This is called *copying* ■ line, and is done by setting ^CO or ^CE.

The two *text-copying modes* are Copy mode and Center mode.

^CO [page-test parameter]

^CE [page-test parameter]

These commands will also test for the end of the page if you specify ■ page-test parameter. Refer to "Testing for the End of the Page" below.

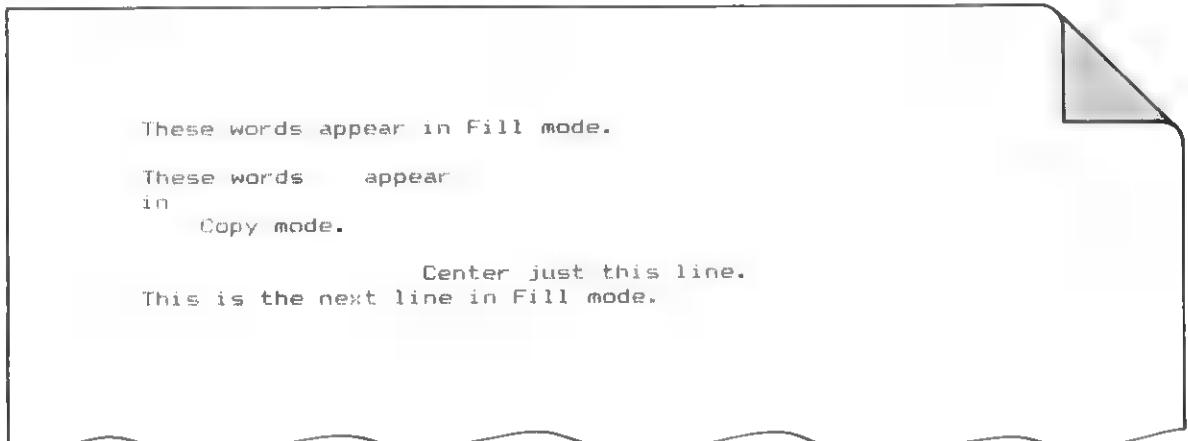
- *Copy mode* (^CO) causes the subsequent text to be printed line-by-line as it appears in the text file. Any spaces between words will be preserved. *Leading spaces are also preserved* (except for the first space after the line number), though trailing spaces are not.
- *Center mode* (^CE) copies (just like ^CO) *and centers* subsequent text, line by line. In addition, *both leading and trailing spaces are ignored*.

Duration. Copy or Center mode remains in effect for subsequent lines *until* the occurrence of ■ ^FI, ^JU, ^CO, ^CE, ^PA, or ^TA command. Following a ^PA (*paragraph*) or ^TA (*tab*) command, Fill mode is set. *Copy and Center modes are not restored after the execution of ^PA or ^TA.*

Example:

:10 These words appear	Fill mode is set.
:20 in	
:30 Fill mode.	
:40 ^sk 1 ^coThese words appear	Skips one line and sets Copy mode.
:50 in	
:60 Copy mode.	Sets Center mode.
:70 ^sk 1 ^ce Center just this line.	
:80 ^fi This is the next line in	Sets Fill mode.
:90 Fill mode.	

The formatted, printed output is:



```

These words appear in Fill mode.

These words      appear
in
      Copy mode.

          Center just this line.
This is the next line in Fill mode.

```

Line Length. If a line in the text file is too long to be printed within the given margins, only as much of the line as fits on one line will be printed. To indicate that, the last two characters printed on that line will be question marks.

Testing for the End of the Page

If you want to be sure that a section of text (like a table or a short paragraph) will not be split between two pages of output, you can include an optional *page-test parameter* with any one of the text mode commands. The page-test parameter represents the number of lines that you want to keep together. This activates the page-testing function to check that there will be enough room for that many lines before the end of the page. If there is enough room (at the time of printing), then the formatter continues to print out text. If there is *not* enough room, then the page advances before the formatter prints more text.

In order for page testing to function properly, the page-length setting must be correct (see $^{\text{PL}}$, page 26), and the formatting job must begin with the printer's printhead aligned with the top of a page. (It should be set on the first line after \blacksquare perforation. Refer also to page 11 in section 1.) The following example uses $^{\text{FI}} 4$ to check that there are at least four lines left on the page before printing out a short paragraph. In this example, Fill mode is set initially, so $^{\text{FI}} 4$ does not change the current text mode.

```
:10 ^pa Start of paragraph one.  
:20 This paragraph continues for  
:30 several lines.
```

Fill mode on.

```
:70 End of paragraph one.  
:80 ^fi 4 ^pa Begin  $\blacksquare$  new paragraph  
:90 with this sentence.
```

Checks for the end of the page within four lines. If there are less than four lines available, then the page advances before the next paragraph is printed.

Indenting Lines

Two other commands that affect the format of \blacksquare line are *paragraph* ($^{\text{PA}}$) and *tab to column* ($^{\text{TA}}$). *Either of these commands will cancel Copy or Center mode.* After the formatter makes the indentation for the new paragraph or a tab, Fill or Justify mode is set. Fill mode is set if the last text mode was Fill, Copy, or Center. Justify mode is only set if it was the text mode just before the $^{\text{PA}}$ or $^{\text{TA}}$ command.

Starting a New Paragraph ($^{\text{PA}}$)

```
 $^{\text{PA}}$  [number of spaces to indent]
```

The default number of spaces is 5 or the last value used.

This command starts a new line of printed text, indenting it the given number of spaces. If no number is given, then the indentation will automatically be the same as it was the last time $^{\text{PA}}$ was used, so you don't have to specify the indentation except to change it. If you don't ever specify an indentation, five spaces are used.

$^{\text{PA}}$ indents from the current left margin, so you can specify \blacksquare negative indentation to start the line to the *left* of the current margin. If, for example, the left margin is set to 8 and you use \blacksquare $^{\text{PA}} -5$, then the first character of the next line will start in column 3. $^{\text{PA}} 0$ will not indent and will skip a line instead. ($^{\text{PA}}$ with other values will *not* skip a line.)

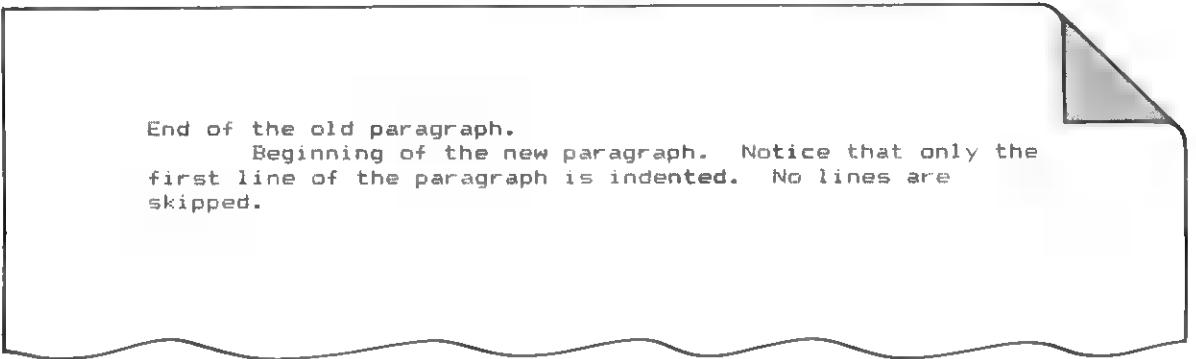
^PA includes an implicit page test for two lines. This avoids having just the first line of a paragraph appear at the bottom of a page.

After indenting, **^PA** restores Fill or Justify mode (whichever was last in effect). If Copy or Center mode was last in effect, **^PA** cancels it and sets Fill mode.

Example:

```
:10 End of the old paragraph.  
:20 ^pa 7 Beginning of the new paragraph.  
:30 Notice that only the first line of the  
:40 paragraph is indented. No lines are  
:50 skipped.
```

The printed, formatted output is:



```
End of the old paragraph.  
Beginning of the new paragraph. Notice that only the  
first line of the paragraph is indented. No lines are  
skipped.
```

Indenting by Tab to a Column (^TA)

```
^TA column number
```

The **^TA** command indents the printed text to the given column position on the same line, if possible.

After tabbing, **^TA** restores Fill or Justify mode (whichever was last in effect). However, the current printed line (the one being tabbed) is never justified. If Copy or Center mode was last in effect, **^TA** cancels it and sets Fill mode.

Example:

```
:10 From: Marian Card
:20 ^ta 50 Date: 5/18/83
:30 ^sk To: Mary Powell
:40 ^ta 50 Subject: Book orders
:50 ^sk 2 I am sorry to report that the text
:60 that we ordered from the bookstore is
:70 out of print. We will need to select
:80 another text and place a new order
:90 as soon as possible.
```

The formatted, printed output is:

From: Mary Powell	Date: 5/18/83
To: Marian Card	Subject: Book orders
 I am sorry to report that the text that we ordered from the bookstore is out of print. We will need to select another text and place a new order as soon as possible.	

If the given column number is less than the current column position in the printed line, then text output will begin in the given column on the *next* printed line.

Formatting a Page

The Text Formatter commands covered under this topic are concerned with formatting the output of a page as a whole, rather than individual lines of text. These commands are **^MA** (*set margins*), **^PL** (*page length*), **^SP** (*set line spacing*), **^SK** (*skip lines*), **^PN** (*page numbering*), and **^AP** (*advance page*).

Setting Margins (^MA)

```
^MA [left margin [right margin] ]
```

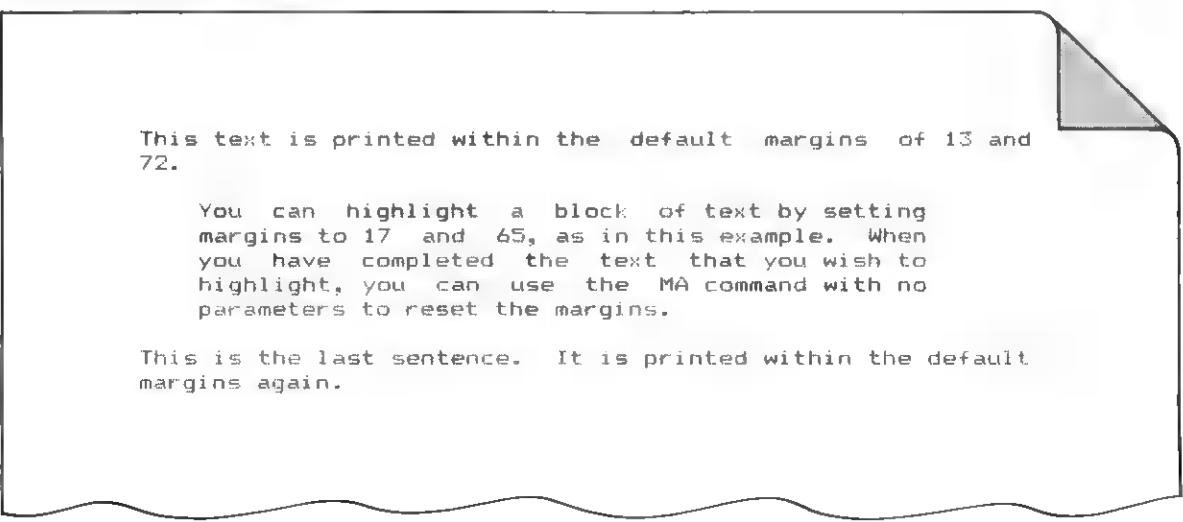
The default left margin is 13, the default right margin is 72.

Each time you run FORMAT75, the left and right margins for the printed page are automatically set to columns 13 and 72. These same default values are set by the command ^MA without any parameters. Or, if only the left margin is set, the right one is automatically 72.

Example:

```
:10 ^ju This text is printed within  
:20 the default margins of 13 and 72.  
:30 ^ma 17 65 ^sk                                Resets margins to 17 and 65.  
:40 You can highlight a block of text by  
:50 setting margins to 17 and 65, as in  
:60 this example. When you have completed  
:70 the text that you wish to highlight,  
:80 you can use the MA command with no  
:90 parameters to reset the margins.  
:100 ^ma ^sk                                     Resets margins to 13 and 72.  
:110 This is the last sentence. It is  
:120 printed within the default margins  
:130 again.
```

The printed, formatted text is:



```
This text is printed within the default margins of 13 and 72.  
  
You can highlight a block of text by setting margins to 17 and 65, as in this example. When you have completed the text that you wish to highlight, you can use the MA command with no parameters to reset the margins.  
  
This is the last sentence. It is printed within the default margins again.
```

The margin numbers refer to column numbers on the page. Although 80 columns is the normal width of a page, you can specify a right margin up to 132. The left margin can be as low as 1.

Page Length (^PL)

```
^PL [page length [top margin [bottom margin] ] ]
```

The default page length is 66, the default top margin is 6, and the default bottom margin is 6.

The ^PL command tells the formatter how many lines of print are possible per page (the total page length), and how many lines to leave as margins on the top and bottom of the page. The usual, $8\frac{1}{2}'' \times 11''$ sheet is 66 lines long for an HP 82905B printer. If you don't set the top and bottom margins, the Text Formatter automatically skips the first and last six lines on each page.

The specifications for page length are necessary for the proper operation of end-of-page testing, page numbering, and paper advancement while a file is being formatted and printed. For the formatter to count the page length properly, the formatting job must begin with the printer's printhead aligned with the top of a sheet of paper.* (You should set the printhead at the first line after a perforation. Refer to page 11 in section 1.)

If you are using a sheet-feed printer, for which you manually insert each sheet of paper, then use a negative number for the page length parameter (for example, -66). The HP-75 will then display this message each time a new sheet is needed:

```
PLEASE INSERT PAGE . . .
```

You can then insert a new sheet of paper, aligning the printhead on the first possible line of the paper, and press **RTN** to continue.

If your printer already automatically skips a certain number of lines for top and bottom margins, then the Text Formatter will skip *additional lines* according to the margins that are set. Therefore, you should know what your printer does for top and bottom margins. (Check the printer's manual.)

* The ^PL command should be set at the beginning of the text file so that it will be set when the printer is at the beginning of the page. Otherwise, ^PL could cause the printer to advance to the next page.

Examples: Suppose you have a sheet-feed printer, printing 60 lines per page, that begins printing on the fourth line of each page. You want one-inch margins at the top and bottom of the page, and the printer prints six lines per inch. Use this page-length command:

```
:10 ^pl -60 3 6
```

Since this printer already skips three lines at the top of a page, your top margin parameter should be 3 (not 6), creating ■ total margin of six lines.

Printers With Perforation Skipping. Some types of thermal printers that use roll or fanfold paper (like the HP 2671A printer) have a perforation-skip feature. This causes the printer to advance past the perforations in the paper, skipping the last and first three lines on each sheet of paper. These printers also usually print 60 lines per page (by default). To obtain ■ one-inch (six-line) margin at the top and bottom of each page, use this page-length command:

```
:10 ^pl 60 3 3
```

Roll-Fed Printers. You can avoid page-length considerations entirely by specifying the page length as $\wedge\text{PL } 0$. This is desirable, for instance, if you are using ■ roll-fed printer, such as an HP 82162A printer.

```
:10 ^pl 0
```

Do not specify top and bottom margins in this case.

Line Spacing ($\wedge\text{SP}$)

$\wedge\text{SP } [\text{number of lines}]$

The default number of lines is 1.

The $\wedge\text{SP}$ command sets the spacing between lines of printed text output. You can set a value from 1 to 5, with 1 for single-spacing, 2 for double-spacing, and so on.

$\wedge\text{SP}$ does not cause a break in printing, that is, it does not cause the printing to stop on one line and start again on a new one.

Example:

```
:10 ^coThese lines are
:20 printed single-spaced.
:30 ^sp 2Now we have switched
:40 to double-spacing,
:50 ^spnow back to single-spacing,
:60 which is the default condition.
```

Since this is in Copy mode, the formatter would preserve any spaces between ■ command and the text.

The formatted, printed output is:

```
These lines are
printed single-spaced.
Now we have switched to

double-spacing,

now back to single-spacing,
which is the default condition.
```

Skiping Lines (^SK)

```
^SK [number of lines]
```

The default number of lines is 1.

The ^SK command causes a break in printing (printing stops on the current line of output and starts again on a new one) and then skips the given number of lines on the formatted page.

If more lines are specified for skipping than there remain on the page, then the printer simply advances to the top of the next sheet.

You can use ^SK 0 to cause a break in printing without skipping any subsequent lines.

Page Numbering (^PN)

```
^PN [page number]
```

The default page number is the current one.

The Text Formatter always keeps track of the total number of printed pages being produced. The ^PN command causes the formatter to print the page number on the second line from the bottom of each page. (The page numbers are not printed unless you use ^PN.)

If `^PN` is used without a parameter, then the current page number, as counted by the formatter, will be printed. Otherwise, you can specify a starting page number for the formatter.

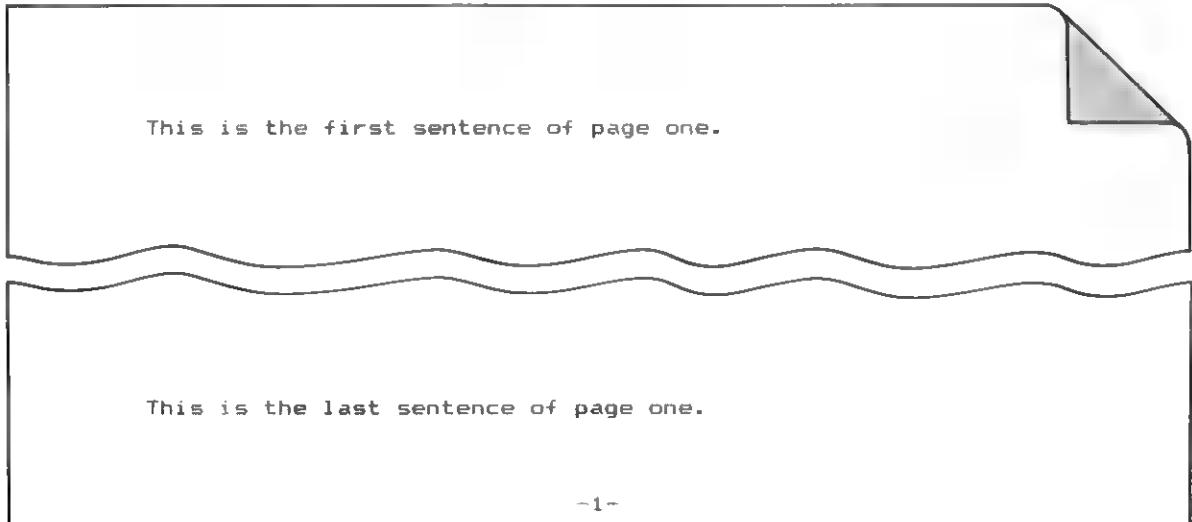
To stop the printing of page numbers, use `^PN 0`. The formatter will still keep track of the number of pages being printed, however. If you resume printing page numbers with `^PN` (no parameter), then the page numbers will be the same as if all the printed pages had been numbered.

In order for page numbering to function properly, the page-length setting must be correct (see `^PL`, page 26), and the formatting job must begin with the printer's printhead aligned with the first line after a perforation. (See page 11 in section 1.)

Example:

```
:10 ^pn ^coThis is the first sentence of page one.  
:20 ^sk 52This is the last sentence of page one.  
:30 This is the first sentence of page two.  
:40 This page will not be numbered.  
:50 ^sk 51 ^pn 0This is the last sentence of page two.  
:60 This is the first sentence of page three.  
:70 ^pn ^sk 52This is the last sentence of page three.
```

The formatted, printed output is:



This is the first sentence of page one.

This is the last sentence of page one.

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This is the first sentence of page two.
This page will not be numbered.

This is the last sentence of page two.

This is the first sentence of page three.

This is the last sentence of page three.

Advancing the Page (^RD)

```
^RD
```

The ^RD command causes a break in printing the output, and advances the printer to the first line for printing on the next sheet of paper. In order for this to work properly, the page length setting must be correct (refer to ^PL on page 26), and the formatting job must start with the printhead aligned with the first line after a sheet's perforation (as explained on page 11 in section 1). If you have set up the formatter for a manual, sheet-feed printer by using a negative parameter for the ^PL command (such as PL -60), then ^RD will also cause the message PLEASE INSERT PAGE... to appear. (See page 26.)

Formatting for a Plotter (^SL)

```
^SL [pen number [character size [character slant]]]
```

The default pen number is 1, the default character size is 3, and the default character slant is 0.

The ^SL (slide) command will format text for printing on an HP-IL plotter (like the HP 7470A). This is especially useful for creating text for slides or transparencies for overhead projection.

The ^SL command must appear as the first command in your text file. It initializes the plotter to start using the specified pen in the upper left corner of the sheet of paper. It will form the characters according to the specified character size and slant. (For more information about the parameters for pen number, character size, and character slant, refer to the owner's manual for the plotter.)

In addition, ^SL resets the page length parameter (46) and the margins (1 and 65) as default parameters for plotting.

Example:*

```
:10 ^sl 1 ■ 5 ^sk 2 ^ce
:20 TITLE FOR SLIDE
:30 ^sl 1 5 0 ^fi
:40 This text is formatted for
:50 the HP 7470 plotter with the
:60 Text Formatter.
:70 ^sp 2 The Text Formatter can make:
:80 ^ta 10 * Slides for meetings.
:90 ^ta 10 * Status summaries.
:100 ^ta 10 * Title pages for reports.
```

Initializes the plotter.

This ^SL command changes the character size and slant.

The formatted, plotted output is:

TITLE FOR SLIDE

This text is formatted for the HP 7470 plotter with the Text Formatter. The

Text Formatter can make:

- * Slides for meetings.
- * Status summaries.
- * Title pages for reports.

* As mentioned in section 1 (under "Plotting With the Text Formatter"), before running FORMAT75 for plotting, connect the plotter to the HP-IL loop, assign a device code to the plotter, and declare the plotter as the printer. (Refer also to section 9 in the *HP-75 Owner's Manual*.)

Altering ^SL Parameters

If you use ^SL without specifying the pen number and/or character size, the default values shown above will be used. If you do not specify the character *slant* parameter, then the slant will remain *unchanged* (it will not go back to zero).

If you want to alter only one or two of any of the parameters and *don't* want to alter the others, you don't have to re-specify them all:

- To keep the pen number and/or character size unchanged, use the value 0. A zero keeps a pen number or character size parameter from changing back to the default value.
- To keep the character slant unchanged, *do not specify anything*. (This is because a 0 value for the slant will *change* the slant to zero.)*

For example, to change the character slant to 5 without changing the current pen number or character size, use:

```
:30 ^sl 0 0 5
```

Character Size and Character Slant

Size. Use the following table for reference in selecting ■ suitable character size for your plotted text:

Char. Size	Chars./Line	Lines/Page
2	98	68
3*	65*	46*
4	49	34
5	39	27
6	32	23
7	28	20
8	24	17
9	21	16

*The default value.

When you change the character size, the margins automatically adjust to accommodate the maximum number of characters that will fit on a line. The page length automatically adjusts to accommodate the maximum number of lines that will fit on a page.

Note: When you change from ■ smaller to ■ larger character size, it is possible for one line to overlap the previous line. To avoid this, include ■ ^SK (skip lines) command after the command to change the character size.

* If you change the ^SL parameter(s) from the original, default values (1 3 0) and then use a ^SL command without any parameters, the last character slant you used will still be preserved.

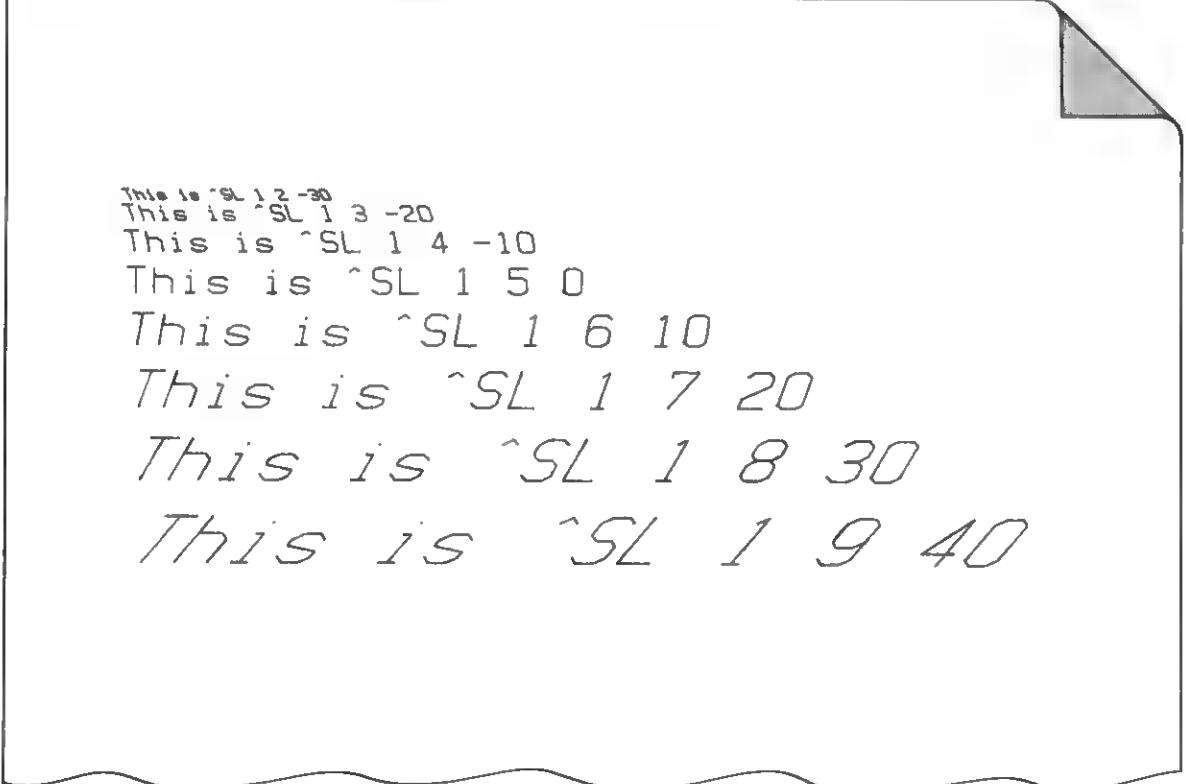
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Slant. The character slant parameter specifies the angle from the vertical line from which the character “leans”. A positive slant makes the character lean forward, while a negative slant makes the character lean backward. The character slant does not affect the horizontal strokes in ■ character. The possible range of values for the character slant is from -80 to 80 (degrees). However, the practical range is from -30 to 30.

Example:

```
:10 ^sl 1 2 -30
:20 ^coThis is ^SL 1 2 -30
:30 ^sl 1 3 -20This is ^SL 1 3 -20
:40 ^sl 1 4 -10This is ^SL 1 4 -10
:50 ^sl 1 5 0This is ^SL 1 5 0
:60 ^sl 1 ■ 10This is ^SL 1 6 10
:70 ^sl 1 7 20This is ^SL 1 7 20
:80 ^sl 1 8 30This is ^SL 1 ■ 30
:90 ^sl 1 9 40This is ^SL1 9 40
```

The formatted, plotted output is:



This is ^SL 1 2 -30
This is ^SL 1 3 -20
This is ^SL 1 4 -10
This is ^SL 1 5 0
This is ^SL 1 6 10
This is ^SL 1 7 20
This is ^SL 1 8 30
This is ^SL 1 9 40

Formatting Combinations of Text Files

There are two text-formatter commands that enable you to format several text files at one time. The **^ME** (*merge*) command in a text file “calls” another file and merges it to the first one. The **^DL** (*distribution list*) command in a text file specifically “calls” and incorporates entries from a *names file*.

Merging Files (^ME)

If you re-use certain standard pieces of information—like ■ letterhead or form letter—it is useful to keep the standard information in a single text file, and then *call* that file from any other file that needs the standard information. This is called *merging* files. You can merge files anytime you want to combine the information from two different text files.

^ME file name

A ^ME command must be either the only or the last command on a line. No text or commands can follow ■ ^ME command on the same line.

The ^ME command causes the Text Formatter to suspend formatting of the current file and begin formatting the specified, called file. Upon reaching the end of the called file, the formatter resumes formatting the original file from the text line after the ^ME command.

The merging function can be *nested*. That is, one file can call a second file for merging, the second file can call ■ third file for merging, and so on, up to a fifth file. An error will occur if you try to nest a series of more than five files.

Example: The following three text files will merge during formatting. The merging is nested three files deep.

```
:10 ^pa 0 This is FILE1 calling
:20 ^me file2
:30 ^pa This is the end of the example.
```

FILE1.

```
:10 FILE2. Now FILE2 will call
:20 FILE3.
:30 ^sk ^me file3
:40 Now we will return to FILE1.
```

FILE2.

```
:10 ^pa This is ■ second paragraph.
:20 It is all part of FILE3.
:30 Now we will return to FILE2.
```

FILE3.

When you run FORMAT75, be sure that the file name specified is FILE1. (FILE1 will then call FILE2, which then calls FILE3.) The printed, formatted output for FILE1 is:

This is FILE1 calling FILE2. Now FILE2 will call FILE3.

This is a second paragraph. It is all part of FILE3. Now we will return to FILE2. Now we will return to FILE1.

This is the end of the example.

Using ■ Distribution List (^DL)

A distribution list—familiar to those who write memos—is a list of people who should receive a copy of a certain memo or report. The ^DL (*distribution list*) command will integrate a series of names (a distribution list) from a *names file* into ■ body of text from ■ source text file.

^DL file name of names file [, replacement character]

The default replacement character is ^ ([CTL] [7]).

The ^DL command creates personalized memos or form letters. When the source file is formatted, ^DL will produce personalized copies for different people without altering the source text file. Whenever the source text file uses the replacement character (the default ^ or the character specified in the ^DL command), the formatter will substitute information from ■ name entry in the names file. The formatter will go through the list in the names file and produce as many different copies of the source file as there are name entries in the names file. Within any one copy, the same information is inserted everywhere the replacement character (^) is encountered in the source file. (To display ^, hold [CTL] and press [7].) The ^DL command must specify the name of the file that has the list of name entries you want to use. You need to specify ■ replacement character only if you want to use something other than ^.

:10 ^dl staff

Calls the names file STAFF for the distribution list.

A ^DL command must be either the only or the last command on a line. No text or command can follow a ^DL command on the same line.

The Names File. To build a names file, simply create a new text file. Use one name entry per text line. The name entry can be as little as a first name or as much as an entire name and address. You can also divide the name entry into fields by separating parts of the entry with a replacement character (^). This allows the source file to call for different parts of a name entry, instead of using the entire name entry for each name insertion. (This is shown in the example below.) You can define up to nine fields in a name entry.

The Replacement Character. The normal (default) replacement character is ` (the accent grave). To obtain this character, hold **CTL** and press **7**. If you want to define a different character for the replacement character, simply specify it along with the ^DL command.

The replacement character is used in both the names file that is called by a ^DL and in the source file that contains the ^DL.

The replacement character used in the corresponding source and names files must be the same.

- In the names file: use ` to define fields in the name entries. Each entry in a file should have the same kinds and number of fields, but you can define a field as you wish. (In other words, if you define a middle name as the second field in one entry, then all entries should use a middle name in the second field.)

If you don't define any fields, then the entire name entry will be one field. You can define up to nine fields.

:10 Becky ` Melissa ` Hansen

This defines three fields: field 1 is the first name, field 2 is the middle name, and field 3 is the last name.

- In the source file: place ` in the source text file everywhere that you want an entry from the distribution list to be inserted. If you want to use only certain fields (which must be defined in the names file) of the name entry, then specify a *field number* after the replacement character. For each field you want the formatter to insert, use `field number.

:30 `1 `3

If the current name entry is *Becky ` Melissa ` Hansen*, then this line in the source file will be printed as *Becky Hansen*.

The replacement character is recognized as a replacement character *only in the text-filling modes* (Fill and Justify). In the text-copying modes (Copy and Center), the replacement character will be printed as any other character, with no special meaning.

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Example: The following source text file, NOTE, uses the following names file, STAFF, to produce ■ personalized memo from a distribution list.

```
:10 Becky Hansen  
:20 Glen Mason  
:30 Elaine Peterman
```

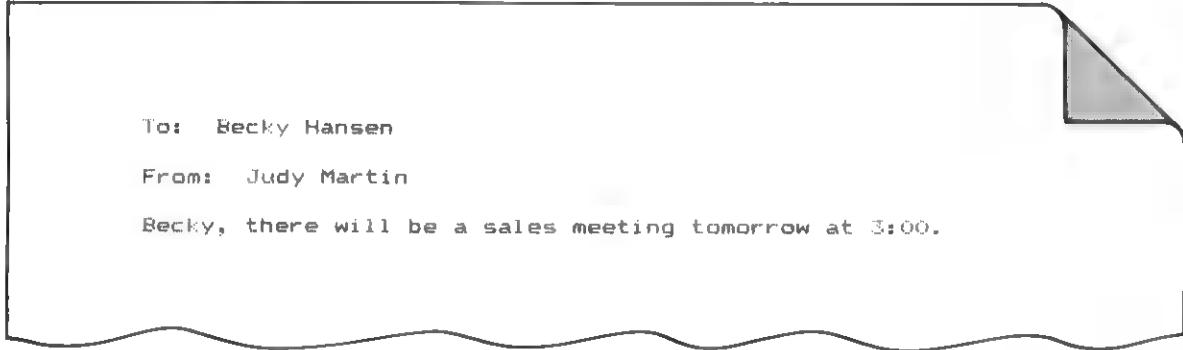
File STAFF. The ` defines fields for the first and last names.

```
:10 ^dl staff  
:20 To:  
  
:30 ^sk 1 From: Judy Martin  
:40 ^sk 1  
:50 `1, there will be a sales  
:60 meeting tomorrow at 3:00.
```

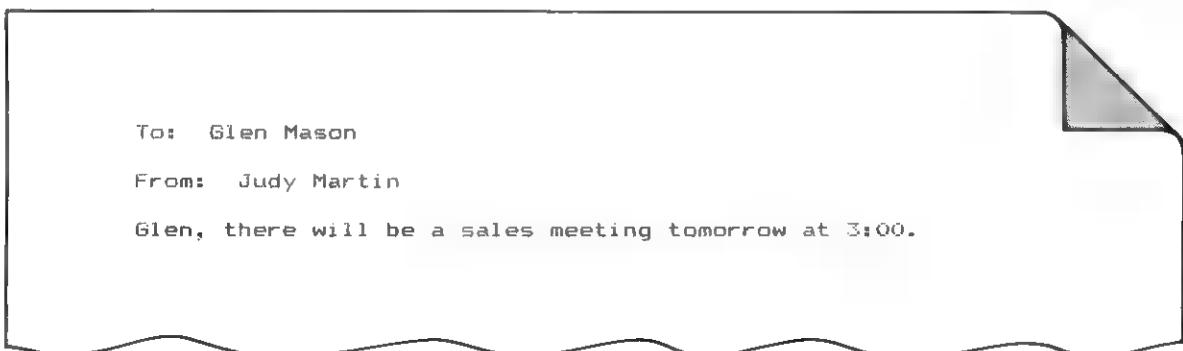
File NOTE. Calls STAFF.
This will insert the entire name entry into the formatted copies.
Every copy will read
From: Judy Martin.
The `1 will insert just the first name field into the formatted copies.

When you run FORMAT75, be sure the file name specified is NOTE (the source file), not STAFF (the names file).

The formatted, printed output for NOTE is:



```
To: Becky Hansen  
From: Judy Martin  
  
Becky, there will be a sales meeting tomorrow at 3:00.
```



```
To: Glen Mason  
From: Judy Martin  
  
Glen, there will be a sales meeting tomorrow at 3:00.
```

To: Elaine Peterman

From: Judy Martin

Elaine, there will be a sales meeting tomorrow at 3:00.

Example: Multiple fields in a names file can be used to set up the address portion of a standard business letter. Suppose the source text file LETTER uses the names file NAMES.

```
:10 John`Smith`ABC Company`1735 Main .
St.`City`State~~60637
```

This shows just one entry from the names file NAMES. It has six fields defined in it.*

```
:10 ^dl names
:20 ^ju ^ta 45 November 16, 1983
:30 ^sk 2 `1 `2
:40 ^sk 0 `3
:50 ^sk 0 `4
:60 ^sk 0 `5, `6
:70 ^sk 2 Dear `1:
:80 ^sk 2 As we discussed in our
:90 last telephone conversation,
```

File LETTER, which calls NAMES.
 Sets Justify mode so that the body of the letter will be justified.
^{^SK 0} causes the printer to move to the next line.

The body of the letter continues.

* If you put two fixed-space characters between the state and the zip code, the printed version will maintain two spaces before the zip code (refer to page 19).

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The formatted, printed output for LETTER is:

November 16, 1983

John Smith
ABC Company
1735 Main St.
City, State 60637

Dear John:

As we discussed in our last telephone conversation,

(

(

(



Appendix A

Owner's Information

Maintenance

The Text Formatter module does not require maintenance. However, there are several precautions, listed below, that you should observe.

CAUTIONS

- Do not place fingers, tools, or other foreign objects into any of the ports. Damage to plug-in module contacts and the computer's internal circuitry may result.
- Turn off the computer (press **SHIFT** **ATTN**) before installing or removing a plug-in module.
- If a module jams when inserted into a port, it may be upside down. Attempting to force it further may result in damage to the computer or the module.
- Handle the plug-in modules very carefully while they are out of the computer. Do not insert any objects into the module connector socket. Always keep a blank module in the computer's port when a module is not installed. Failure to observe these cautions may result in damage to the module or the computer.

Limited One-Year Warranty

What We Will Do

The Text Formatter is warranted by Hewlett-Packard against defects in materials and workmanship affecting electronic and mechanical performance, but not software content, for one year from the date of original purchase. If you sell your unit or give it — a gift, the warranty is transferred to the new owner and remains in effect for the original one-year period. During the warranty period, we will repair or, at our option, replace at no charge a product that proves to be defective, provided you return the product, shipping prepaid, to a Hewlett-Packard service center.

What Is Not Covered

This warranty does not apply if the product has been damaged by accident or misuse or as the result of service or modification by other than an authorized Hewlett-Packard service center. No other express warranty is given. The repair or replacement of ■ product is your exclusive remedy. ANY OTHER IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS IS LIMITED TO THE ONE-YEAR DURATION OF THIS WRITTEN WARRANTY. Some states, provinces, or countries don't allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. IN NO EVENT SHALL HEWLETT-PACKARD COMPANY BE LIABLE FOR CONSEQUENTIAL DAMAGES. Some states, provinces, or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state, province to province, or country to country.

Warranty for Consumer Transactions in the United Kingdom

This warranty shall not apply to consumer transactions and shall not affect the statutory rights of ■ consumer. In relation to such transactions, the rights and obligations of Seller and Buyer shall be determined by statute.

Obligation to Make Changes

Products are sold on the basis of specifications applicable at the time of manufacture. Hewlett-Packard shall have no obligation to modify or update products once sold.

Warranty Information

If you have any questions concerning this warranty, please contact an authorized Hewlett-Packard dealer or a Hewlett-Packard sales and service office. Should you be unable to contact them, please contact:

- In the United States:

Hewlett-Packard
Corvallis Division
1000 N.E. Circle Blvd.
Corvallis, OR 97330
Telephone: (503) 758-1010
Toll-Free Number: (800) 547-3400
(except in Oregon, Hawaii, and Alaska)

- In Europe:

Hewlett-Packard S.A.
7, rue du Bois-du-Lan
P.O. Box
CH-1217 Meyrin 2
Geneva
Switzerland
Telephone: (022) 83 81 11

Note: Do not send products to this address for repair.

- In other countries:

Hewlett-Packard Intercontinental
3495 Deer Creek Rd.
Palo Alto, CA 94304
U.S.A.
Telephone: (415) 857-1501

Note: Do not send products to this address for repair.

Service

Service Centers

Hewlett-Packard maintains service centers in most major countries throughout the world. You may have your product repaired at a Hewlett-Packard service center any time it needs service, whether the unit is under warranty or not. There is ■ charge for repairs after the one-year warranty period.

Hewlett-Packard computer products normally are repaired and reshipped within five (5) working days of receipt at any service center. This is an average time and could vary depending on the time of year and work load at the service center. The total time you are without your product will depend largely on the shipping time.

Obtaining Repair Service in the United States

The Hewlett-Packard United States Service Center for battery-powered computational devices is located in Corvallis, Oregon:

Hewlett-Packard Company
Corvallis Division Service Department
P.O. Box 999
Corvallis, OR 97339, U.S.A.
or
1030 N.E. Circle Blvd.
Corvallis, OR 97330, U.S.A.
Telephone: (503) 757-2000

Obtaining Repair Service in Europe

Service centers are maintained at the following locations. For countries not listed, contact the dealer where you purchased your unit.

AUSTRIA
HEWLETT-PACKARD Ges.m.b.H.
Kleinrechner-Service
Wagramerstrasse-Lieblgasse 1
A-1220 Wien (Vienna)
Telephone: (0222) 23 65 11

BELGIUM
HEWLETT-PACKARD BELGIUM SA/NV
Woluwehal 100
B-1200 Brussels
Telephone: (02) 762 32 00

DENMARK
HEWLETT-PACKARD A/S
Datavej 52
DK-3460 Birkerod (Copenhagen)
Telephone: (02) 81 66 40

EASTERN EUROPE
Refer to the address listed under Austria

FINLAND
HEWLETT-PACKARD OY
Revontulentie 7
SF-02100 Espoo 10 (Helsinki)
Telephone: (90) 455 02 11

FRANCE
HEWLETT-PACKARD FRANCE
Division Informatique Personnelle
S.A.V. Calculateurs de Poche
F-91947 Les Ulis Cedex
Telephone: (6) 907 78 25

GERMANY
HEWLETT-PACKARD GmbH
Kleinrechner-Service
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International Service Information

Not all Hewlett-Packard service centers offer service for all models of HP products. However, if you bought your product from an authorized Hewlett-Packard dealer, you can be sure that service is available in the country where you bought it.

If you happen to be outside of the country where you bought your unit, you can contact the local Hewlett-Packard service center to see if service is available for it. If service is unavailable, please ship the unit to the address listed above under "Obtaining Repair Service in the United States." A list of service centers for other countries can be obtained by writing to that address. All shipping, reimportation arrangements, and customs costs are your responsibility.

Service Repair Charge

There is a standard repair charge for out-of-warranty repairs. The repair charges include all labor and materials. In the United States, the full charge is subject to the customer's local sales tax.

Computer products damaged by accident or misuse are not covered by the fixed repair charge. In these cases, repair charges will be individually determined based on time and materials.

Service Warranty

Any out-of-warranty repairs are warranted against defects in materials and workmanship for ■ period of 90 days from date of service.

Shipping Instructions

Should your product require service, return it with the following items:

- A completed Service Card, including ■ description of the problem.
- A sales receipt or other documentary proof of purchase date if the one-year warranty has not expired.

The product, the Service Card, a brief description of the problem, and (if required) the proof of purchase date should be packaged in adequate protective packaging to prevent in-transit damage. Such damage is not covered by the one-year limited warranty; Hewlett-Packard suggests that you insure the shipment to the service center. The packaged product should be shipped to the nearest Hewlett-Packard designated collection point or service center. Contact your dealer for assistance.

Whether the product is under warranty or not, it is your responsibility to pay shipping charges for delivery to the Hewlett-Packard service center. After warranty repairs are completed, the service center returns the product with postage prepaid. On out-of-warranty repairs in the United States and some other countries, the product is returned C.O.D. (covering shipping costs and the service charge).

Further Information

Service contracts are not available. Computer products circuitry and design are proprietary to Hewlett-Packard, and service manuals are not available to customers. Should other problems or questions arise regarding repairs, please call your nearest Hewlett-Packard service center.

Technical Assistance

The keystroke procedures and program material in this manual are supplied with the assumption that the user has ■ working knowledge of the concepts and terminology used. Hewlett-Packard's technical support is limited to explanations of operating procedures used in the manual and verification of answers given in the examples. Should you need further assistance, you may write to:

Hewlett-Packard
Corvallis Division Customer Support
1000 N.E. Circle Blvd.
Corvallis, OR 97330

Dealer and Product Information

For additional product information, refer to the accessory brochure that was included with your HP-75, contact your local Hewlett-Packard dealer, or call toll-free in the United States (800) 547-3400. In Oregon, Alaska, and Hawaii, call (503) 758-1010.

Appendix B

Error and Status Messages

The Text Formatter produces certain messages under specific conditions. Some of these are merely status messages, while others occur in response to an error. An incorrectly typed or constructed command will produce an error message. In most cases, an error message does not halt text-file printing.

Status and error messages can appear either in the HP-75 display or on the printed output.

Displayed Messages

These messages, listed in alphabetical order, can appear in the display:

DONE

The Text Formatter has completed printing and the HP-75 is now ready for the next task.

FILE *file name* NOT FOUND

The specified file is not in memory.

FILE, # OF COPIES: *file name*, 1

Requests the name of the text file to use as input to the Text Formatter, and the number of copies that you want printed.

FORMATTING ...

The Text Formatter is running.

NOT ENOUGH MEMORY

There is not enough available memory to run the text formatter. You may need either to purge some files or execute CLEAR VARS (see section 5 in the *HP-75 Owner's Manual*) to make room.

PLEASE INSERT PAGE ...

If a sheet-feed printer or a plotter is in use, change the paper and press [RTN] to continue.

Printed Messages

The following messages, in alphabetical order, can appear on the printer:

***MULTIPLE DISTRIBUTION LISTS: ^DL *file name* ***

Only one distribution list file may be used in any particular document.

***PARAMETER ERROR: ^*command first parameter [second parameter]* ***

A valid command name has been used with an invalid parameter, such as setting the left margin in a higher-numbered column than the right margin. The command and parameters you supplied are printed.

***TOO MANY MERGE FILES: ^ME *file name* ***

The nesting limit of merge files has been reached. Up to five levels of merging are permitted.

***UNKNOWN COMMAND: ^*command* ***

A command has been mistyped. Formatting will continue without altering any of the modes in the Text Formatter.

Appendix C

Text Formatter Applications

Memo Writing

If you are going to write a lot of short memos, you can save considerable typing time by using the BASIC program F75START, which is included on a magnetic card in the Text Formatter package. (A listing of this file is given after the following example.) Load this program into memory as described in the *HP-75 Owner's Manual*, section 8, using the COPY CARD TO command. You should edit line 80 of this file and insert your name (as described in section 3 of the *HP-75 Owner's Manual*).

When you execute this program, it will prompt you for standard information for the memo (the file name, the name of the person the memo is for, and the subject), create the text file for the memo, fill in your name and address and the date, and then leave you to write the body of the memo.

Memo Example

Example: Suppose you're writing a memo to Rich Duncan about light fixtures. Your name should be assigned to the variable M\$ in line 80 of F75START. (Edit the file F75START and fetch line 80.)

Input/Result

run' f75start' **RTN**

The prompt can be > or :.

File name? **■**

Enter the file name for your memo. For this example, use LIGHTS.

lights **RTN**

To: **■**

Enter the name of the person to whom you are sending the memo.

Rich Duncan **RTN**

Subject: **■**

Next, enter the subject of the memo.

Input/Result

Lights [RTN]

```
LIGHTS      T 115 13:08 12/22/82
```

This creates the text file LIGHTS, which already includes five lines (from 10 to 50) for the head of the memo.

Now go to the end of the file and add the body of the text.

Input/Result

[SHIFT] ↓

Fetches the last line in the file. (Hold [SHIFT] and press [↓].)

```
:50■^sk 2
```

```
[RTN] auto [RTN]
```

Starts automatic line numbering at line 60. You are now ready to add text.

```
:60 ■
```

Add the following lines of text to the LIGHTS file and then run FORMAT75 to format it.

```
:60 The light fixtures that we ordered for the
:70 new hallway are going to arrive three weeks
:80 earlier than we anticipated. Unless you have
:90 any objections, I would like to store them in the
:100 back of Warehouse B until they can be installed.
```

Press [ATTN] to stop the automatic line numbering.

Input/Result

```
1 run 'format75' [RTN]
```

```
FILE, # OF COPIES: LIGHTS ,1
```

```
[RTN]
```

```
FORMATTING...
```

The formatted, printed memo is:*

From: my name

Date: 82/12/22

To: Rich Duncan

Subject: Lights

The light fixtures that we ordered for the new hallway are going to arrive three weeks earlier than we anticipated. Unless you have any objections, I would like to store them in the back of Warehouse B until they can be installed.

* The HP-75 interprets the date with the year first, then month, then date.

F75START Listing

This listing shows the F75START program:*

>10 INPUT 'File name?';F\$	Asks for file name.
>20 ON ERROR GOTO 60	Sets error trap.
>30 ASSIGN # 1 TO F\$,TEXT	Assigns file buffer.
>40 ON ERROR GOTO 70	
>50 READ # 1 ; A\$	
>60 BEEP @ DISP " ***FILE ALREADY EXISTS *** @ END	Attempts to read from the named file. If it <i>can</i> read from that file, it displays an error and ends the program.
>70 OFF ERROR	Cancels the ON ERROR condition.
>80 M\$='my name'	You should substitute your name for 'my name' in this program.
>90 INPUT 'To: ';T\$	Asks you for the addressee.
>100 INPUT 'Subject: ';S\$	Asks you for the subject of the memo.
>110 PRINT # 1,10 ; " From: "&M\$	Lines 110 to 150 transmit text and formatter commands to the named text file.
>120 PRINT # 1,20 ; " ^TA 50 Date: "&DATE\$	
>130 PRINT # 1,30 ; " ^SK To: "&T\$	
>140 PRINT # 1,40 ; " ^TA 50 Subject: "&S\$	
>150 PRINT # 1,50 ; " ^SK 2"	
>160 EDIT F\$ @ END	Moves edit pointer and ends program.

Club Membership Roster

This example produces a letter to be sent to all the members of a bowling league. It uses the ^DL (*distribution list*) command to call a names file (where the members' names and dues are stored) and print out a letter reminding the members of the next meeting and any outstanding dues. (Review the ^DL command before using these files.) The listing below is for a names file called MEMBERS containing club members' names, addresses, and outstanding dues.

```
:10 Jeff`Igelman`3174 Broadway`Anytown, Anystate 40896`10.00
:20 Carol`Johnson`274 McKinley Ct. Anytown, Anystate 40897`30.00
:30 Martha`Woodstone`1205 Fir Street`Anytown, Anystate 40896`15.00
```

* If you have redefined the commands in F75PRMPT, then you would need to modify this file to correspond with F75PRMPT.

The next listing is for a text file named BOWL to call the names file MEMBERS and produce the letter for the bowling club.

Note: This file uses escape codes to produce different typefaces on the printer. If you are not familiar with the use of escape sequences, refer to appendix G, "Advanced Printing Techniques."

:10 ^dl members	Calls MEMBERS for the name entries.
:20 ^ma 1 40	Sets narrow margins so expanded print will fit.
:30 ^coESC&k1S	Escape code for expanded print.*
:40 ^ce Emerald Bowling League	Restores margins to 13 72.
:50 ^ma	Escape code for emphasized (bold) print.*
:60 ^coESC&k9S	
:70 ^ce Devoted to Excellence in Bowling	
:80 Having Fun Since 1969	
:90 ^coESC&k0S	Escape code for normal print.*
:100 ^ju 2 9/14/83	Sets Justify mode.
:110 ^sk 2 ` 1 ` 2	Prints first, last names.†
:120 ^sk 0 ` 3	Prints address, city, state, and zip code.
:130 ^sk 0 ` 4	
:140 ^sk 2 Dear ` 1:	Personalizes greeting.
:150 ^pa 0 This is the first newsletter of our	Starts a paragraph without indentation;
:160 fall season. As you may be aware, our	skips a line.
:170 summer tournament was a big success! The	
:180 big winners are:	
:190 ^coESC&k9S	Sets bold print.*
:200 ^ta 25 Name	
:210 ^ta 45 Average	
:220 ^coESC&k0S	Sets normal print.*

* To store an escape sequence given as ESC&k1S, type [SHIFT] [I/R], then [ESC] ([CTL] [BACK]). This will display the escape character . Then type &k1S. A copying mode (Copy or Center) should precede the escape sequence to cause a break in the output. For more information, see appendix G.

† To get ` , press [CTL] [7].

```
:230 ^ta 20 John Photenhauer
:240 ^ta 47 205
:250 ^ta 20 Bob Andersen
:260 ^ta 47 197
:270 ^ta 20 Jerry Moore
:280 ^ta 47 196
:290 ^pa Our congratulations to everybody
:300 who made the summer so much fun!
:310 ^pa It's now time to get ready for the fall
:320 season. If you haven't already signed up
:330 to get involved, this is the time. To
:340 keep your membership current, you need
:350 to make sure that your dues are paid up.
:360 In your case, `1, the membership dues
:370 owed are $`5.
:380 Please fill out the enclosed sign-up
:390 sheet so that we know which time you
:400 would like to bowl.
:410 ^sk ^ce New Members
:420 ^pa We would like to welcome two
:430 new members to the club. They are Dave
:440 Anderson and Martha Smith. Dave is new
:450 to bowling, and is eager to learn. In
:460 just three months, he's brought his
:470 average up to 144, so watch out,
:480 everyone! Martha comes to us from the
:490 Jake's Pizza team in Millersburg, and
:500 has an average of 195.
:510 ^sk ^ce Monthly Meeting
:520 ^pa Our next meeting and open bowl
:530 will be on the last Friday of September.
:540 We'll be at the City Bowling Lanes at
:550 8:00 pm.
:560 Let's see everybody on hand for a fun
:570 evening of bowling!
```

Inserts names from names file.

Centers heading.
New paragraph (resumes in Fill mode).

Centers heading.
New paragraph (resumes in Fill mode).

The formatted, printed output for BOWL will be three identical memos, each with different name information. The first copy will be:

Emerald Bowling League

**Devoted to Excellence in Bowling
Having Fun Since 1969**

9/14/83

Jeff Igelman
3174 Broadway
Anytown, Anystate 40896

Dear Jeff:

This is the first newsletter of our fall season. As you may be aware, our summer tournament was a big success! The big winners are:

Name	Average
------	---------

John Photenhauer	205
Bob Anderson	197
Jerry Moore	196

Our congratulations to everybody who made the summer so much fun!

It's now time to get ready for the fall season. If you haven't already signed up to get involved, this is the time. To keep your membership current, you need to make sure that your dues are paid up. In your case, Jeff, the membership dues owed are \$10.00. Please fill out the enclosed sign-up sheet so that we know which time you would like to bowl.

New Members

We would like to welcome two new members to the club. They are Dave Anderson and Martha Smith. Dave is new to bowling, and is eager to learn. In just three months, he's brought his average up to 144, so watch out, everyone! Martha comes to us from the Jake's Pizza team in Millersburg, and has an average of 195.

Monthly Meeting

Our next meeting and open bowl will be on the last Friday of September. We'll be at the City Lanes at 8:00 pm. Let's see everybody on hand for a fun evening of bowling!

Appendix D

Typing Aids (F75KEYS)

Among the magnetic cards that come with the Text Formatter is one with the file F75KEYS recorded on it. The F75KEYS file contains a set of key redefinitions that you can use as typing aids—as shortcuts for entering the Text Formatter commands. For instance, the keystroke sequence $\wedge me$ is redefined to [CTL] [A] (hold [CTL] while pressing [A]). Note that all of the key redefinitions use *control sequences*.

The redefined sequences are:

Command	Redefined Control Sequence
$\wedge me$	[CTL] [A]
$\wedge pl$	[CTL] [E]
$\wedge ad$	[CTL] [G]
$\wedge ce$	[CTL] [I]
$\wedge ju$	[CTL] [K]
$\wedge fi$	[CTL] [O]
$\wedge pa$	[CTL] [P]
$\wedge dl$	[CTL] [Q]
$\wedge sp$	[CTL] [R]
$\wedge sl$	[CTL] [S]
$\wedge ma$	[CTL] [T]
$\wedge co$	[CTL] [U]
$\wedge pn$	[CTL] [W]
$\wedge sk$	[CTL] [Y]
RUN 'FORMAT75'	[CTL] [RUN]
$\wedge ta$	[CTL] [TAB]

You can store this file in memory (as explained in section 8 of the *HP-75 Owner's Manual*), then copy it to the HP-75 KEYS file for use when entering ■ text file (see section 10 in the *HP-75 Owner's Manual*). If you have already redefined some keys for use in other applications, and wish to preserve those redefinitions, use the procedure shown here:

```
rename keys to 'keytemp'
```

First, save the current keys file in a temporary file.

rename 'f75keys' to keys

Next, copy the redefinitions for the Text Formatter to keys.

The keyboard is now redefined and ready for use. You might find it convenient to use the provided keyboard overlay to remind you of the new definitions of the keys. The redefined keyboard is:



Input/Result

120 [CTL] [P]

For instance, press [CTL] [P] to get ^pa.

:120 ^pa

[CTL] [RUN]

A big timesaver is the new sequence for run 'format75'.

:RUN'FORMAT75'

FILE, # OF COPIES? file name, 1

When you are done using the Text Formatter and want to restore your original key definitions, save F75KEYS and restore KEYTEMP to the KEYS file:

rename keys to 'f75keys'

rename 'keytemp' to keys

For more about redefining your keyboard, refer to section 10 of the *HP-75 Owner's Manual*.

Appendix E

The Help File (F75HELP)

One of the magnetic cards included with the Text Formatter contains the "help" file, F75HELP. You can use this file for reference and reminder since it contains a list of the Text Formatter commands and their parameters. (This same information is in the Quick Reference Card for the Text Formatter.) This can be used for quick reference while you're "on the go". To use the file, you can either list it (LIST or PLIST) or EDIT it and use [FET] (FETCH) to find a particular command. Load this file from the card into the memory of your HP-75, as explained in section 8 of the *HP-75 Owner's Manual*. The text of F75HELP is:

```
:10 HP-75 Format75 Commands
:20 ^ad advance page
:30 ^ce [n] center mode
:40 ^co [n] copy mode
:50 ^dl filename[,R$] select distribution list
:60 ^fi [n] fill mode
:70 ^ju [n] justify mode
:80 ^ma [13 [70]] set margins
:90 ^me filename merge file
:100 ^pa [5] new paragraph
:110 ^pl [66[ 6[ 6]]] page size
:120 ^pn [n] page numbering on
:130 ^sk [1] skip lines
:140 ^sl {1[ 3[0]]} slide
:150 ^sp [1] set line spacing
:160 ^ta n tab to column n
```

In this file, [n] refers to an optional, numeric parameter. Numerals in brackets (like [13 [70]]) refer to default values for those optional parameters.

Appendix F

The Prompt File (F75PRMPT)

One of the magnetic cards included with the Text Formatter contains the "prompt" text file, F75PRMPT. Once you load this file into the memory of your HP-75 (see section 8 of the *HP-75 Owner's Manual*), you can edit it line by line and use it to change any command or message the Text Formatter uses. That is, you can redefine the letters or messages used and recognized by the Text Formatter. This is strictly an option for you; you do not have to define your own commands and messages.

The file F75PRMPT contains messages, command mnemonics, and special characters that are used by FORMAT75. Whenever you run FORMAT75, it will look for the prompt file in memory. If it finds the prompt file, it will use any definitions the prompt file contains. This allows you to change commands, prompts, error messages, and command characters to suit your personal taste. For instance, if you would rather the paragraph command were ^PP instead of ^PA, just fetch line 10 of F75PRMPT and change the third and fourth characters to ^PP.

Important Note: There is no protection in the Text Formatter against invalid changes you might make to F75PRMPT. If you change or delete a line, unpredictable results can occur. If line 10 does not exist, the prompt file will be purged. If line 10 exists but is not exactly 32 characters long, this line will be ignored by FORMAT75. (You can re-enter F75PRMPT from the magnetic card if you do accidentally alter or purge F75PRMPT.)

The text of F75PRMPT is:

```
:10PNPASPADFIGOCESIJUMASKTADLPLME^~  
:20NOT ENOUGH MEMORY  
:30FILE, # OF COPIES:  
:40UNKNOWN COMMAND:  
:50TOO MANY MERGE FILES:  
:60PARAMETER ERROR:  
:70MULTIPLE DISTRIBUTION LISTS:  
:80PLEASE INSERT PAGE...  
:90FILE "  
:100" NOT FOUND  
:110FORMATTING...  
:120DONE
```

Rules to follow for F75PRMPT are:

- Line 10 must be exactly 32 characters long, but all other lines can be up to 92 characters long.
- Do not leave any blanks after the line numbers. (If you use automatic line numbering, you will need to backspace once.)
- Do not change the line numbers. Your new message must be on the same line as the original one.
- In line 10: characters #1 to #30 must be upper █ and must *not* be numerals, blanks, or the command character.
- In line 10: characters #31 to #32 must not be blanks. It is best *not* to use numerals or letters for these (the command character and the fixed-space character).

Appendix G

Advanced Printing Techniques

Hewlett-Packard printers share a common standard for *escape sequences*. Escape codes or sequences are special keystroke sequences used for controlling printer operations. You include these sequences in your text file, just like formatter commands, to control the printer. You can set alternate printing modes (such as expanded or compressed print), vertical line spacing, page length, and so on. With a little practice, you can learn to enhance the appearance of your documents by using the features that your printer provides. For instance, you can emphasize a heading at the top of a page by printing in expanded mode, which prints characters at twice their normal width.

To write an escape sequence in a text file line, you must:

1. Start a new line and set Copy or Center mode (type `^c0` or `^ce`). (The text-copying mode is necessary to break the output from the previous line. In this way, the escape sequence only affects the text that follows it.*.) Do not leave a space after the `^c0` or `^ce`.
2. Press **SHIFT I/R**. (This "literalizes" the escape sequence to follow so that the escape sequence will be displayed and stored, and not executed.)
3. Press **ESC (CTL BACK)**. This produces the *escape character*, `>`, and makes the cursor disappear.
4. Type the actual escape sequence, such as `&k1S`. (The cursor will return.) You must use upper and lower cases as they are shown. Be careful to distinguish between 1 (one) and l (lower-case L), between 0 (zero) and O (upper-case O).

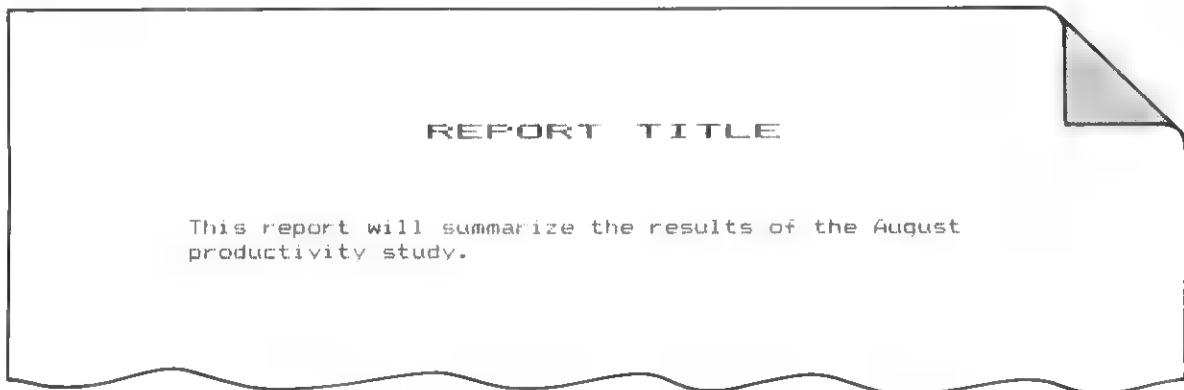
A program or file listing will typically indicate an escape sequence as, for example, `ESC&k1S`. This means "the escape sequence `&k1S`". To actually enter this sequence, you must type **SHIFT I/R ESC &k1S**. When you first enter this line, the escape character will be visible. However, any print-out or subsequent listing of that line will only show `&k1S`.

* It is possible to use escape sequences in Fill or Justify mode, but in that case each escape sequence must be both preceded and followed by a `^SK 0` command to break output before and after the escape sequence.

Example: On the HP 82905B printer, the escape sequence for expanded print is ESC&k1S. Create a text file with the following lines and then format it. (To see the effect on the print, you must use an HP printer that can use escape sequences.)

:10 ^coESC&k1S	Begins expanded printing.
:20 ^ma 6 35	Adjusts the margins.
:30 ^ce REPORT TITLE	Prints the title.
:40 ^coESC&k0S	Restores normal print.
:50 ^ma	Restores default margins.
:60 ^sk 2 ^fi This report will	Begins printing in Fill mode.
:70 summarize the results of the	
:80 August productivity study.	

The formatted, printed output is:



There are some important points to remember when using escape sequences. When sending escape sequences as in the above example, the printer will generate a carriage return and a linefeed. This causes the printer to advance one line. The internal line count of the Text Formatter will be incremented as well, so your page count will still be accurate.

The following table summarizes common features that HP printers implement and their escape sequences. For detailed information about your printer, refer to the owner's manual for that printer.

Common Printer Features and Their Escape Sequences

Operation	Feature	Escape Sequence	Printer
Vertical Line Spacing	6 lines/inch	ESC2 ESC&I6D	HP 82905A* HP 82905B*
	■ lines/inch	ESC0 ESC&I8D	HP 82905A HP 82905B
Skip Perforation	On	ESC&I1L	HP 2671* HP 82905B
	Off	ESC&I0L	HP 2671 HP 82905B*
Select Print Mode		ESC&knS †	All

* The default condition for this printer.
† Where *n* is a number corresponding to the print mode that you want. To select a print mode, choose the appropriate number from the following table.

Note: "I" is ■ lower-case L.

Print Mode Numbers

Mode	n	Printers
Normal	0	HP 82162A, HP2631G, HP 2671, HP 82905B
Expanded	1	HP 82162A, HP 82905B, HP 2631G
Compressed	2	HP 2671, HP 82905B, HP 2631G
Compressed, Expanded	3	HP 82905B, HP 2631G
Emphasized*	9	HP 82905B

* Boldface.

For example, to set the HP 82905B printer to Emphasized print mode, use ESC&k9S . You might want to redefine some keys for the escape sequences that you use most often. Refer to appendix D in this manual and section 10 of the *HP-75 Owner's Manual* for further information.

Appendix H

Calling FORMAT75 From a BASIC Program

You can call FORMAT75 from another BASIC program in the HP-75. This feature is useful, for example, when you want to generate documents similar to the applications examples in appendix C, or if you want to format several files while you are away from your computer.

Example: Suppose that you want to format the file SAMPLE (in section 1, page 10) from a BASIC program. Make sure that SAMPLE is in memory. Then create a BASIC program named CALLER, as shown:

Input/Result

>edit 'caller', basic [RTN]

Creates the BASIC file CALLER.

```
CALLER  B 000 15.15 05/19/83
```

Enter these lines in CALLER:

```
>10 edit 'sample'  
>20 put chr$(13)  
>30 call 'format75'  
>40 disp 'Back to BASIC!'
```

This creates ■ carriage return.

Input/Result

>run 'caller' [RTN]

Now run CALLER.

```
SAMPLE      T 499 13:07 05/18/83
```

Line 10 makes SAMPLE the current edit file.

File, # OF COPIES: SAMPLE ,1

By "putting" ■ carriage-return, the file name is entered for you. Refer to the PUT statement in the *HP-75 Owner's Manual*.

FORMATTING...

Prints SAMPLE.

DONE

FORMAT75 will finish the job.

Back to BASIC!

And you have returned to CALLER!

Command Summary and Index

This index is an alphabetical listing of all fifteen HP-75 Text Formatter commands. Each entry gives a short description of the command: its syntax, its default parameter values, and a page reference to the main text.

`^AD`

(page 31)

Advancing the Page. Causes a break in printing the output and advances the printer to the first line for printing on the next sheet of paper.

`^CE [page-test parameter]`

(page 20)

Center Mode. Copies (as in Copy mode) and centers the subsequent text from the text file, line by line. Leading and trailing spaces on a line are ignored during formatting. Center mode lasts until a `^FI`, `^JU`, `^CO`, `^PA`, or `^TA` command is executed. `^PA` or `^TA` will set Fill mode.

`^CO [page-test parameter]`

(page 20)

Copy Mode. Causes the subsequent text from the text file to be copied line by line exactly as it appears on the text-file line. Trailing spaces are ignored, but leading spaces are preserved. Copy mode lasts until a `^FI`, `^JU`, `^CE`, `^PA`, or `^TA` command. `^PA` or `^TA` will set Fill mode.

`^DL file name of names file [, replacement character]`

(page 36)

Default value: ` (`CTL` 7)

Distribution List. Integrates a series of entries from a names file into a body of text from a source text file. Wherever the source text file uses the replacement character, the formatter will substitute information from the names file. The formatter will produce as many different formatted versions of the source file as there are entries in the names file. Within any one copy, the same information is inserted everywhere the replacement character is encountered.

No text or command can follow a `^DL` command on the same line. You can use only one `^DL` per text file.

In the names file, you can specify fields within each name entry by separating parts with the replacement character.

```
:10 Becky^Melissa^Hansen  
:10 Dear Ms. ^3:
```

This name entry in the names file has three fields. This command in the source text file will be formatted as Dear Ms. Hansen:

^FI [page-test parameter]

(page 17)

Fill Mode. The default text mode. Fill mode produces full lines of filled, formatted text. Any extra spaces in your text file—leading, trailing, or intermediate—are ignored.

^JU [page-test parameter]

(page 17)

Justify Mode. Causes the formatted text to be filled (as in Fill mode) *and* right-justified.

^MR [left margin [right margin]]

(page 25)

Default values: 13 72

Margins. Sets left and right margins to the numbered columns.

^ME file name

(page 35)

Merge. Causes the text formatter to suspend formatting of the current file and begin formatting the specified file. You can nest up to five files for merging. No text or commands can follow a ^ME command on the same line.

^PA [number of spaces to indent]

(page 22)

Default value: the last value used for ^PA; or 5

Paragraph. Starts a new line of printed text, indenting it the given number of spaces. If no number is given, it indents the same number as it did the last time ^PA was used. After indenting, ^PA restores Fill or Justify mode, whichever was last in effect. If Copy or Center mode was last in effect, ^PA cancels it and sets Fill mode.

A negative indentation parameter will move the beginning of the paragraph to the left of the prescribed margin. The command `^PA 0` will not indent and will skip a line instead.

`^PA` includes an automatic page test for two available lines on the sheet.

`^PL [page length [top margin [bottom margin]]]`

(page 26)

Default values: 66 6 6

Page Length. Tells the formatter how many lines of print are possible per page (the total page length), and how many lines to leave as margins on the top and bottom of the page. For a sheet-feed printer, use a negative number for the page length parameter.

`^PN [page number]`

(page 28)

Default value: the current page number

Page Numbering. The text formatter always keeps track of the page numbers, but they are not printed until the command `^PN` occurs. Subsequently, `^PN 0` will halt the printing of page numbers.

`^SK [number of lines]`

(page 28)

Default value: 1

Skip Lines. Causes a break in printing on the current line of output, then skips the given number of lines on the formatted page. `^SK 0` will cause a break without skipping any lines.

`^SL [pen number [character size [character slant]]]`

(page 31)

Default values: 1 3 0

Slide. Initializes an HP-IL plotter to produce the text file using the given pen, character size, and character slant. The `^SL` command must be the first command in a file to be plotted. The page length is automatically set to 46 and the left and right margins to 1 and 65 (for the default parameters).

The character size parameter can be from 2 to 9. The character slant parameter is practical from -30 to +30 (degrees).

When using the `^SL` command, to keep the pen number and/or character size unchanged, use the value 0. To keep the character slant unchanged, do not specify a character slant.

`^SP [number of lines]`

(page 27)

Default value: 1

Spacing. Sets the spacing between lines of printed text output. The number of lines of spacing can be from 1 to 5. This command does not cause ■ break in printing.

`^TA column number`

(page 23)

Tab to a Column. Indents the text being printed to the given column position on the same line, if possible. After the tab, Fill or Justify mode—whichever one was last in effect—is restored. However, the current printed line (the one being tabbed) is never justified. If Copy or Center mode was last in effect, `^TA` cancels it and sets Fill mode.

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